

III. Remarks

Claims 1-24 are pending in the current application. Applicants are grateful to the Examiner for allowing Claims 1-20. Claims 21-24 stand rejected. Claim 21 has been amended, as discussed below, to clarify the claimed subject matter. Reconsideration and withdrawal of the rejection of Claims 21-24 are respectfully requested in view of the foregoing amendment and the following arguments.

A. Rejection under 35 U.S.C. § 102(b)

The Action rejects Claims 21-24 as being anticipated by U.S. Patent No. 5,717,198 to Broude et al. In the rejection, the Examiner notes that "Broude et al teach of a method for projecting a light unto a position at a pellicle and monitoring a change in the detected signal." Applicants respectfully submit that the Examiner has misconstrued the teachings of Broude et al. and/or what Applicants have claimed.

Amended Claim 21 recites a method including: (a) projecting a light beam at a position corresponding to a dimensional tolerance limit of a photolithography element; (b) detecting the light beam at the position; and (c) monitoring for a change in the detected light beam at the position, indicative that a dimension of a photolithography element has at least reached the dimensional tolerance limit. Claim 21 has been amended to clarify that the dimensional limit is a dimensional tolerance limit. The claimed method allows for the determination of when a dimension of a photolithograph element (e.g., a pellicle element (Claim 22)) exceeds its dimensional tolerances, such as from expansion due to heat. (Page 9, Line 26-Page 10, Line 9).

Broude et al. describes a system where light beam 36 is directed at locations on a mask 12 to determine the size of flaws detected in the mask. (Column 4, Lines 28-38). Broude et al. teaches a method of accounting for light scattered or reflected by the pellicle covering the mask. Although the system can be used with pellicles of different heights (Column 5, Lines 28-38), Broude et al. provides no disclosure with respect to monitoring whether a photolithography element (e.g., pellicle) is within dimensional tolerance limits.

Referring to FIGS. 2 and 4 of Broude et al., a light beam 36 is projected at an angle onto and through pellicle element 14 to mask 12. The light 36a is then reflected toward reflection sensor 44. As noted, Claim 21 provides for the step of projecting a beam at a position corresponding to a dimensional tolerance limit of a photolithography element, detecting the light beam at the position (which corresponds to the dimensional tolerance limit of the photolithography element) and monitoring for a change "indicative that a dimension of the photolithography element has at least reached the dimensional tolerance limit." By way of example, in Applicants' claimed method, the beam may be projected across and above a surface of the pellicle to a position where a sensor is located. The position of the sensor corresponds to the dimensional tolerance limit of the pellicle (e.g., height). As long as the light beam is detected at the sensor, it can be determined that the pellicle has not reached its dimensional tolerance limit. As the pellicle (or mask) heats up, it can expand to a height at or above its dimensional tolerance limit. At this point, the beam will be blocked from the sensor by the pellicle/mask assembly, and it can be determined that the pellicle assembly has reached the dimensional tolerance limit.

Per the foregoing analysis, it is submitted that continuously providing a beam 36 to positions on the pellicle/mask assembly of Broude et al. to detect sizes of imperfections in the mask does not teach projecting the light beam to a position corresponding to the dimensional tolerance limits of the assembly or monitoring a change in the detected beam indicative that the dimensional limit of the assembly has at least reached the dimensional tolerance limit. Indeed, Claim 21 specifically recites that the light beam is detected "at the position," i.e., at the position corresponding to a dimensional tolerance limit of the photolithography element. Broude et al. provides no disclosure with respect to providing sensors at a position that corresponds to a dimensional tolerance limit of a photolithography element. Claim 21, therefore, is not anticipated by the cited reference and is allowable. Claims 22-24 depend from Claim 21 and are also allowable. Reconsideration and withdrawal of the rejection are respectfully requested.

PATENT
Express Mail Label No. EV154868874US

IV. Conclusion

In view of the foregoing remarks and amendments, Applicants submit that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Assistant Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account **04-1769**.

Respectfully submitted,

Dated: September 29, 2003

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